DOCUMENT RESUME

ED 428 221 CE 078 254

TITLE	Management Development.
PUB DATE	1997-03-00
NOTE	26p.; In: Academy of Human Resource Development Conference Proceedings (Atlanta, Georgia, March 6-9, 1997); see CE 078 221.
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Adult Education; Adult Learning; Cognitive Style; Decision Making; Educational Practices; Educational Theories; *Employer Employee Relationship; *Feedback; Human Resources; *Labor Force Development; Learning Processes; Learning Theories; *Management Development; Models; Personality Traits; Theory Practice Relationship; Training Methods

ABSTRACT

This document contains three papers from a symposium on management development. "LMX (Leader-Member Exchange) Theory, Personality Type, and Management Development" (Janet Z. Burns) reports the results of a study on the similarities and differences in personality type (as outlined in the theories of Carl Jung and Isabel Myers) and its relationship to perceived quality of leader and subordinate interactions. "Frameworks for Choice of Management Development Methods" (Alan Mumford) proposes that management development methods be assessed with respect to four frameworks: impact on knowledge, skills, and insight; congruence with learning theories; relevance to learning to learn; and congruence with learning styles. In "Effectiveness of 360-Degree Feedback on Management Development from the Recipient's Perspective" (Stephen M. Callender, Albert W. Wiswell) the findings of interviews with feedback recipients are discussed to further understanding of two questions: What influences managers to accept or deflect 360-degree feedback in a management development program? and What influences their change decision process toward deep versus superficial change? (MN)

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ED 428 221

ACADEMY OF HUMAN RESOURCE DEVELOPMENT

1997 Conference Proceedings

March 6-9, 1997
Atlanta, GA

33 **Management Development**

Chair: Peter J. Dean, University of Tennessee

LMX Theory, Personality Type and Management Development
Janet Z. Burns, Georgia State University

Frameworks for Choice of Management Development Methods
Alan Mumford, Specialist in Director and Management Development

Effectiveness of 360-Degree Feedback on Management Development from the Recipient's Perspective
Stephen M. Callender, Personnel Decisions International
Albert K. Wiswell, Virginia Polytechnic Institute & State University

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LMX Theory, Personality Type, and Management Development [1]

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This paper reports the results of a study on the similarities and differences in personality type, as outlined in the theories of Carl Jung and Isabel Myers, and its relationship to perceived quality of leader and subordinate interactions. Although it has been documented that different types of exchange relationships develop between leaders and members, previously there has been a lack of research attention given to the developmental process. This study suggests that organizations should develop their leaders to promote understanding and usefulness of personality differences in work groups. Initiatives that HRD professionals can take to develop managers to maximize the human resource of their work team are also suggested.

The primary purpose of this research was to address an identified gap in theory and research on leader-member exchange (LMX). Specifically, little theory and almost no research has directly addressed the question of how leader-member relationships develop in work teams, despite a theoretical base emphasizing the role-definition process (Burns, 1995). Research on the relationship of the leader and individual members of work teams has neglected personality variables although early theorists considered this topic important. By tracing LMX theory back to its roots of role theory (Kahn et al., 1964; Katz & Kahn, 1966) this researcher noted that the concept of personality was mentioned briefly and then slighted. Kahn and his colleagues (1964) studied personality in the context of reaction to role conflict and role ambiguity. Katz and Kahn (1966) addressed personality by pointing out that human complexities are simplified in organizations through the mechanism which they termed "partial inclusion."

In early LMX research, personality was not addressed at any length when studies were conducted on the role formation process of leaders and work group members. Researchers did not address it because they believed that good instrumentation was lacking. (Burns, 1995) Therefore, this present study was designed to address that gap by testing the proposition that personality type, as proposed in the theories of Carl Jung and Isabel Myers, is associated with the development of LMX quality.

Methodology

Subjects. An "availability sampling" approach (Keppel, Saufley, Jr., & Tokunaga, 1991, p. 17) was used in this study. All subjects attended a major university located in metropolitan Atlanta. The *MBTI*, Form F, was administered to 148 potential subjects approximately 2 weeks prior to the experiment during several different graduate and undergraduate classes. From this subject pool, 10 groups of 8 members each were formed based upon each group membership including two undergraduate members each of the ST, SF, NF and NT personality types. In addition, 10 students enrolled in graduate courses in human resource development, business, urban studies, or teacher education served as leaders. The 10 graduate student leaders each represented

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[1] **This paper is an adaptation of the doctoral dissertation of the author.**

one of the four different personality types. The result was 80 leader-member dyads for this research, distributed over the following three possible dyad types:

1. Matched — Leader and members had exactly the same type.
2. Mismatched — Leader and members had opposite types, for example, NF leader and ST member.
3. Mixed — Leader and members matched on only one dimension, for example, NF leader and either SF or NT member.

Of the 80 leader-member dyads in this research, 20 were matched (25%), 40 were mixed (50%), and 20 were mismatched (25%) in relation to leaders.

Instruments. Instruments used in this study were the *Myers-Briggs Type Indicator*, Form F, 166-item version (Briggs & Myers, 1976), the *Negotiating Latitude Scale*, 2-item version (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975), and the *In-group/Out-group Measure* (Duchon, Green, & Taber, 1986; Heneman, Greenberger, & Anonyuo, 1989).

Treatment. A simulation work exercise was used as a treatment, the *NASA Moon Survival Task* (Hall, 1989). This exercise asks participants to imagine that they are part of a space crew that has crash landed about 200 miles from a rendezvous site. Group members are told that survival depends upon reaching the Mother Ship at that site and that only 15 items of equipment were not destroyed in the crash. Subjects work individually and then as a group to rank order the 15 items in order of importance to survival.

Procedure. Group leaders, prior to the experiment, were instructed by the experimenter on how to conduct four rounds of interactions with group members, the first three interactions were one-on-one with members, the fourth was with the total group. The 10 group leaders and groups were identified and taken to a "work" area. The work simulation was conducted. It took approximately 1 1/2 hours. Then the *NL-2* scale and the *In-group/Out-group* measure were administered at the end of the treatment.

Hypotheses and Data Analysis

Six sets of alternative (research) and null hypotheses logically flowed from the way in which types of leader-member dyads were set up. The research hypotheses were as follows:

1. Members in matched dyads will report being allowed greater negotiating latitude than will members in mismatched dyads.
2. Members in matched dyads will report being allowed greater negotiating latitude than will members in mixed dyads.
3. Members in mixed dyads will report being allowed greater negotiating latitude than will members in mismatched dyads.
4. There will be a greater proportion of In-group members from matched dyads than from mixed or mismatched dyads.
5. There will be a greater proportion of members in the Middle-group from mixed dyads than mismatched dyads.
6. There is a positive relationship between Negotiating Latitude scores and group status.

Hypotheses 1, 2, and 3 were tested (in null form) using Analysis of variance and planned comparisons. Hypotheses 4 and 5 were tested (in null form) using the Chi-Square statistic. Hypothesis 6 was tested (in null form) using analysis of variance and correlational procedures. Additionally, although no hypothesis was stated, the measures of LMX used in this study and the nomination of in-group or out-group status were subjected to correlational analysis to determine to what extent they were related. In all tests a .05 level of significance was used.

Results

With Negotiating Latitude used as the dependent variable and type of dyad used as the independent variable, an analysis of variance yielded a significant F ratio. This finding meant that overall LMX quality varied significantly according to dyad type, as had been conjectured. However, when the planned comparisons were done, hypotheses 1 and 2 were supported, but hypothesis 3 was not.

Results from the analysis of variance are presented in Table 1. As shown in Table 1, overall LMX quality varied significantly according to dyad type ($F = 11.7588$, $df = 2$, $p < .0000$).

Table 1

Analysis of Variance of LMX Quality by Dyad Type

Source of Variation	Sum of Squares	df	Mean Squares	F	Significance of F
Between	30.4125	2	15.2063	11.7588	.0000
Within	99.5750	77	1.2932		
Total	129.9875	79			

The means and standard deviations for LMX quality and dyad type are presented in Table 2.

Table 2

Means of Scores Reported by Members on the NL-2 Instrument Measuring LMX Quality

Dyad Type	N	Mean	SD
Matched	20	7.500	.6070
Mixed	40	6.375	1.1477
Mismatched	20	5.800	1.2827

Chi-Square analysis yielded statistically significant values providing support for hypotheses 4 and 5 although small numbers in some cells suggest that these results be interpreted with caution. Results are presented in Tables 3 and 4.

Table 3

Chi-Square Results for Group Status by DyadType as Reported by Members

	In-group		Mid-group		Out-group	
Dyad Type	N	%	N	%	N	%
Matched	12	60	4	20	4	20
Mixed	18	45	19	47.5	3	7.5
Mismatched	8	40	5	25	7	35

Pearson X^2 (4, N = 80) = 10.44737, p < .033

Likelihood Ratio X^2 (4, N = 80) = 10.36209, p < .034

Table 4

Chi-Square Results for Group Status by Dyad Type as Reported by Leaders

	In-group		Mid-group		Out-group	
Dyad Type	N	%	N	%	N	%
Matched	11	55	7	35	2	10
Mixed	14	35	23	57.5	3	7.5
Mismatched	4	20	9	45	7	35

Pearson X^2 (4, N = 80) = 12.04200, p < .017
Likelihood Ratio X^2 (4, N = 80) = 11.02672, p < .026

Both the analysis of variance an the correlational analysis that were conducted in relation to hypothesis 6 yielded statistically significant values, thereby supporting hypothesis 6, although correlations were weak to moderate.

Results from the first analysis of variance are presented in Table 5. As shown in Table 5, overall NL-2 scores varied significantly according to group status as reported by members.

Table 5

Analysis of Variance of NL-2 Scores by Group Status as Reported by Members

Source of Variation	Sum of Squares	df	Mean	F	Significance of F
Between	19.9086	2	9.9543	6.9543	.0017
Within	110.0789	77	1.4296		
Total	129.9875	79			

The means and standard deviations for NL-2 scores and group status as reported by members are presented in Table 6.

Table 6

Means of NL-2 Scores for Each Group

Group Status	N	Mean	SD
In-group	38	6.8947	1.2690
Mid-group	28	6.5000	.9230
Out-group	14	5.5000	1.4544

Results from the second analysis of variance for Hypothesis 6 are presented in Table 7. As shown in Table 7, overall group status as reported by leaders varied significantly by NL-2 scores.

Table 7

Analysis of Variance of NL-2 Scores by Group Status as Reported by Leaders

Source of Variation	Sum of Squares	df	Mean Squares	F	Significance of F
Between	17.7737	2	8.8669	6.0822	.0035
Within	112.2538	77	1.4578		
Total	129.9875	79			

The means and standard deviations for NL-2 scores and group status as reported by leaders are presented in Table 8.

Table 8

Means of NL-2 Scores for Each Group

Group Status	N	Mean	SD
In-group	29	7.1034	1.1447
Mid-group	39	6.2821	1.1459
Out-group	12	5.8333	1.5275

To test null hypothesis 6 in a different way a Spearman Rank Correlation was conducted. The correlations between the NL-2 instrument, Leader's ranking of members, and each member's ranking of themselves were all significant ($p = .001$). The coefficients are shown in Table 9.

Table 9

Spearman Correlation of NL-2 Scale With Leader and Member Ranking of Group Status

	N	Spearman Correlation Coefficient	ρ value
Member Ranking	80	.3674	.000
Leader Ranking	80	.3792	.000

Conclusions

Conservatively, the following three conclusions can be drawn from this study. First, personality type seems to influence LMX development, and rather quickly. This conclusion seems reasonable given the support found for Hypotheses 1, 2, 4, and 5. Role theory, (Kahn et al., 1964; Katz & Kahn 1966) the theoretical underpinning of LMX theory, suggests that personality, or the compatibility of style or preferences between a leader and member, may be a complicating factor in role development in an organizational setting. This study supports these authors' views.

Second, different LMX instruments may yield different results. While both major measures of LMX used in this study (NL-2 and the In, Mid, Out-group status measure) revealed differing amounts of negotiating latitude in leader-member dyads and the actual classification of members into different groups, the correlation between the two measures was weak to moderate. The third measure that was used, Duchon, Green and Taber's (1986) procedure of asking group members to rank each other, had a negative correlation with both leader rankings of members and member's self rankings and no significant correlation with the NL-2 instrument scores.

Third, further research in this area is needed to confirm these initial findings. The need for research devoted to developmental processes that contribute to LMX quality is clear in the literature (Burns, 1995). Because the LMX construct of negotiating latitude is based on perception, the current study employed only the two perceptual scales of the Myers-Briggs personality typology. However, when one returns to Role theory, (Kahn et al., 1964; Katz & Kahn, 1966) the theoretical base of LMX theory, roles are referred to not as perceptions, but as patterns of behavior. Other MBTI scales (Extrovert/Introvert, Judgment/Perception) deal with outward behavior. Based upon interaction found in this study, and the theoretical underpinnings of LMX theory, research should move forward from perception and begin describing the behavioral components in the initial development of the LMX relationship as well.

The current research employed what Graen and Scandura (1987) would probably call a laboratory/psychometric design. They pointed to a need for LMX research designs that are part qualitative and part quantitative. Therefore, this researcher recommends that the current study's design be expanded by using a combination of testing and observation. Observation of the leader-member dyad and interactions should be attempted to explore how a personality disposition as defined by the Myers-Briggs typology translates into role making behavior in the leader-member dyad.

Implications for HRD Application

In considering the antecedents and results of this research, the researcher is struck by the finding that personality--which is orderly, consistent, and perhaps largely nonchangeable--appears to contribute to the quality of a leader-member relationship. The findings of this study, if substantiated by further research, could lead to new theories for designing and conducting several types of HRD programs. The results, if confirmed in field studies, could mean that leaders and work group members with similar combinations of personality preferences share the same kind of perceptions and have a better chance of success at a good working relationship. If so, then organizations should avoid the assumption that the complexities of human participants can be simplified or ignored.

Selection and Related Training. First, the researcher will address the area of selection where one might erroneously attempt to hire only one personality type or only those candidates who are similar. It is important to beware of the trap of classifying one personality type as the most desirable type, with the resultant stereotyping of its characteristics. Rather, each person should be viewed as an individual; each dyad of manager and subordinate as unique. In planning hiring strategies or putting work groups together, one must keep in mind that since each type contributes unique characteristic strengths, differences in type can be an asset to an organization because they help people to do and enjoy different kinds of work. More than one management style is effective; different employees and managers respond to different treatment. Additionally, diversity is a salient issue for today's workforce, and developing the flexibility to deal with each person as an individual is an implied aspect of personality typology.

However, when one combines different types of leaders and members, the leader-member exchange relationship can run into difficultly. As shown in this study, opposite kinds of perception lead to lower quality LMXs and these relationships can lead to ineffective organizational outcomes. Managers and HR personnel may need new training in selection procedures. While honoring the strengths of diversity, selection strategies should be combined with management development strategies affording managers the opportunity to learn how to capitalize on the strengths and develop the "blind spots" of new subordinates and team members. Management development and team building programs should then be modified to be less of a one-size-fits-all approach.

Training Interventions. Graen and Cashman (1975) suggested "awareness" of the vertical dyad linkage can enhance team-building exercises. However, training programs based on the lower levels of Bloom's Cognitive Taxonomy are probably not enough for either half of the dyad. It may be beneficial to design training in steps in the affective domain of learning (Krathwohl, Bloom & Masia; cited by Cranton, 1989) with the characterization level as the goal. There are additional program implications for training in communication skills and conflict resolution strategies.

Organizational Support. As with all HRD programs, awareness raising and team building training must be supported in the workplace in order to be effective. The leaders of the organization must be open and looking for tools to help them deal with problems and they must pursue particular goals and be willing to commit resources.

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Frameworks for Choice of Management Development Methods

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Descriptions of management development methods largely focus on the proposed virtues of the particular method, and how it is used. There has been no substantial published overall study or research on the purposes for which particular methods are best suited. This paper proposes that methods should be assessed on Four Frameworks - Impact on Knowledge, Skills, Insight; Congruence with learning theories; Relevance to Learning to Learn; Congruence with Learning Styles.

Articles and books about particular methods of Management Development more often appear to be works of advocacy rather than analysis. They most frequently describe the virtues of the method, and how it is used. Where descriptions of particular features which the method may be especially good at developing are offered, they tend to focus on knowledge and skills, and to generalize descriptions of why a particular method may work, such as "creates interaction", or "offers real experiences". This paper proposes that a focus on how to make a method work effectively omits the crucial preceding step of identifying why the method should be chosen at all. As Peter Drucker identified for us years ago, it is the difference between efficiency - doing something well, and effectiveness - doing the right thing. Those authors who have attempted to summarize strengths and weaknesses of a method (see for example Rothwell and Kazanas, 1993) provide a useful quick guide, but lack in depth of analysis, and coverage of some of the most relevant issues.

There are few references to any learning theory to explain why a particular method might suit specific needs, only a few very generalised references to whether a method does or does not suit individual preferences about how to learn (Learning Styles), and none that this author can trace on the potential of the method for learning to learn. The focus on a preference for describing "how to", as distinct from "why", is revealed for example on the Case Method, which is so widely used in Business Schools. Barnes, Christensen, Hansen (1994) say "we do not have a good way of understanding or evaluating how people learn". Given the period over which case studies have been used and the money poured into writing them, this is a revealing statement. The word 'we' may however be an appropriately modest word, since it is the purpose of this paper to show that it is possible to assess how people learn.

Definitions

Huczynski (1983) identified 303 'teaching and learning methods'. In fact many of these could be contained within a recognizable 'family'. 16 methods as shown in the Frameworks are reviewed here. Method is defined here as "the specific means through which learning is acquired by individuals".

Many different definitions of learning or development have been produced. One most appropriate to reviewing methods is :

Learning has happened when people can demonstrate that they know something they did not know before (insights and realizations as well as facts) and/or when they can do something they could not do before (skills) (Honey & Mumford 1995).

The term "Framework" is used here to denote a regular structure through which methods can be assessed.

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Problem Content

The literature on management development methods is dominated by enthusiastic descriptions of how a method was used successfully, with helpful advice about the strategy and tactics involved in using case studies, business games, outdoor or adventure training. Since there is very little about why a particular method was chosen to meet particular needs, it is not surprising that there has been no substantial review comparing one method with another. Very little is written about how the success of a method may be related to any learning theory. While promotional literature may emphasize nowadays the supposed contribution of programmes to 'learning to learn', in-depth analysis of why a particular method might contribute to this is not provided. Finally, there is a tendency to generalize about the suitability of a method for a particular purpose as if all learners are equally likely to learn from it. The proposition of this Paper is that the choice of a method can be made more systematically. The effect of this would be likely to be that tutors would spend less time doing perhaps very well what they should not be doing at all. Four Frameworks are proposed to assist more effective choice. (The detailed analysis supporting the conclusions in the Frameworks is contained in Mumford (1997).

Framework 1 - Knowledge, Skills, Insights

Methods are employed as answers to particular problems or opportunities :

Knowledge - "Managers need a better understanding of the value chain model."

Skill - "I need to have a way of improving interviewing skills."

Insight - "As an American, two or three experiences in different European countries have shown the importance of culturally determined behaviours."

Which method is most likely to be most effective in dealing with such needs?

Framework 2 - Learning Theories

Unlike the Harvard authors quoted earlier, this author contends that quite a lot is known about how managers learn. The implications of particular learning theories for specific methods, however, has not previously been analysed in detail. This means that the choice of a method is not apparently related to the circumstances in which it will work, for which kind of learning, and for which type of learner.

Framework 3 - Learning to Learn

The idea that management education and training programmes facilitate 'learning to learn' (Deutero Learning) has become a cliche of providers' brochures. Very little has been written to indicate how programmes actually attempt to improve learners' ability to learn. It seems likely this is a missed opportunity. Some methods contain a wider range of experiences and therefore more learning to learn opportunities than others.

Framework 4 - Learning Styles

Learner A may learn very well from a role play, and Learner B much less. Since this can occur with individuals who, in other respects, in terms of needs, current situation, particular tutors, have been exposed to the same experience, the conclusion is that one kind of learner likes role plays and another does not. In the last twenty years this midly helpful conclusion has been developed into a theory and methodology for identifying individual learning styles.

Methodology

Literature was reviewed to confirm this author's speculation that very little has been written about 'why' as compared with 'how'. It was further discovered that existing analyses focused on whether a method was good at developing Knowledge or Skills. The Frameworks presented here were developed as a result of reviewing what additional analyses could help in selecting the right method. The four Learning Theorists were selected as those most frequently mentioned in management development literature.

The Content of the Four Frameworks

Framework 1 - Knowledge, Skills, Insights

While "competence" has become a favoured word in management development in recent years, this breakdown provides more specific guidance. Insight may be an unfamiliar description - "attitude" has often been used. Insight better captures issues about perceptiveness, wisdom, the sudden recognition of how things fit together - the 'Ah-ha' effect. No attempt is made in the Framework summaries to distinguish between different kinds of knowledge and skill; this is done in the detailed analyses (Mumford 1997).

Framework 2 - Relationship to Learning Theories

Malcolm Knowles (1985) - His theory of "Andragogy" - Adult Learning - includes:

- the learner comes with experience that means that with many kinds of learning, adults are themselves the richest resources for one another;
- adults are ready to learn when they have a need to perform more effectively a task, solve a problem or live in a more satisfying way.

Reg Revans (1982) - Though less well known in the United States, Revans' identification of Action Learning as a major propellent for the development of managers is of major significance. Crucial aspects include:

- the difference between two types of learning: P (Programmed Knowledge) and Q (Questioning Insight)
- problems, opportunities or tasks involving responsible action are the essential vehicle for learning
- people working in groups on problems support and challenge each other.

David Kolb (1984) - His version of the Learning Cycle (a sequence from Concrete Experience through Reflective Observation, to Abstract Conceptualization and finally Active Experimentation) provides a powerful and usable description of how people learn. His major accompanying innovation was the development of a model explaining how individuals may differ in their willingness to learn at different stages of the Cycle - Learning Styles.

Chris Argyris (1982) - He has constructed three different though linked major theories. He distinguishes between Single Loop and Double Loop Learning. The first is designed to correct mistakes and error as defined by current policies, objectives and rules. In contrast Double Loop Learning describes what can be learned by questioning those policies and rules. In Espoused Theories Versus Theories In Use he brings out the difference between what people say guides their action, and what actually guides their action. His third theory, Defensive Routines, explains the way in which individuals are prevented from asking the questions which might enable them to learn.

Pedler's Typology of Learning (1978) is used to distinguish between Cognitive, Affective, Interpersonal and Self-Knowledge as types of learning.

Framework 3 - Learning to Learn

Each method is considered on whether it has the potential to contribute on a wide or narrow basis to Learning to Learn.

Framework 4 - Learning Styles

This Framework uses the Honey & Mumford Learning Styles Questionnaire; it is technically more reliable and has a more direct correlation with issues about methods than does the Kolb LSI. The LSQ defines four Learning Styles, summarized very briefly below. The statements apply to those individuals shown by their score against norms to have a strong preference for that style of learning. They are likely therefore to react either very favourably or unfavourably to a particular method.

Activists - like learning from new experiences and problems, enjoy here and now methods such as business games, role playing. Like being thrown in at the deep end, and prefer to be involved with other people. They dislike passive learning experiences, solitary work and being asked to review their experiences.

Reflectors - like to collect data, to observe, and to analyse and review. They dislike being thrown into things without thought or planning and being rushed or placed under time pressure.

Theorists - demand learning drawn through systems, models, concepts and theories. They want to question assumptions and logic and to be intellectually stretched. They dislike being faced with relatively superficial techniques or methods, and tend to avoid or discount methods emphasising emotions and feelings.

Pragmatists - demand an obvious link between the subject matter and a problem or opportunity in the work they do. They are interested in techniques so long as they are seen to be relevant, and seem to provide immediate opportunities for application. They dislike learning which seems to be concerned with general principles or is associated with other situations, organizations or environments quite different from their own.

Other Comments

There are a number of other factors which might influence the acceptability and effectiveness of a particular method, including Gender, National Culture, Organizational Culture and Age. Unfortunately there is very little specific information on these issues, certainly not enough to construct Frameworks at this time.

An Oxford University philosopy paper was supposed to have posed the following question :
"All generalizations are untrue. Discuss." It is certainly the case that George Orwell in 'Animal Farm' wrote "all animals are equal, but some animals are more equal than others". It should be remembered that the generalizations contained in the summary frameworks should be treated with caution, and must be supplemented by a detailed review (Mumford 1997). The ratings attributed to each method should be reviewed by readers, who could produce their own ratings.

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FRAMEWORK 1. Management Development Methods

	SUITABILITY FOR:		
	KNOWLEDGE	SKILLS	INSIGHTS
AT WORK			
COACHING	A	A	B
MENTORING	A	B	A
MANAGER DEVELOPER	A	A	B
THROUGH THE JOB	A	A	B
OFF THE JOB			
ACTION LEARNING	B	B	A
CASE STUDY	B	A	B
DISTANCE LEARNING	A	B	C
LECTURE	A	C	B
OUTDOOR	C	B	B
READING	A	C	B
ROLE PLAY	C	A	A
SIMULATIONS	C	A	A
TECHNOLOGY BASED TRAINING	A	C	C
VIDEO - TALKING HEAD	A	C	B
VIDEO - CASE/DRAMA	B	B	B
OTHER			
GROUP LEARNING			
- ABOUT GROUPS	A	A	A
- OTHER LEARNING	B	B	A
LEARNING REVIEWS	C	A	A

NOTE:

1. RATING SCALE
   - A = MOST SUITABLE FOR
   - B = MODERATELY SUITABLE FOR
   - C = LEAST SUITABLE FOR
2. GENERALISATION
   The limitations of generalisations are exposed here. What kind of Knowledge? Which Skills? But these issues are discussed in the relevant Chapter.
3. GROUP LEARNING
   Wide range of possible contexts (eg. real work groups, temporary 'teams' on courses).

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FRAMEWORK 2.

Relationship of Management Development Methods to Learning Techniques

	Knowles	Revans	Argyris	Kolb 1	Kolb 2	Cognitive	Affective	Inter Personal	Self Know-ledge
AT WORK									
COACHING	A	C	C	A	A	C	B	B	A
MENTORING	A	C	C	A	A	C	B	B	A
LINE MAN--AGER AS DEVELOPER	A	A	C	A	A	C	B	B	A
THROUGH THE JOB	A	A	B	A	A	B	B	B	B
OFF THE JOB									
ACTION LEARNING	A	A	A	A	A	B	A	A	A
CASE STUDY	A	C	B	A	A	B	C	B	C
DISTANCE LEARNING	C	C	C	C	A	A	B	C	C
LECTURE	C	C	C	C	A	A	B	C	C
OUTDOOR	B	C	C	A	A	C	A	A	A
READING	C	C	C	C	A	A	C	C	B
ROLE PLAY	B	C	C	A	A	C	A	A	B
SIMULATIONS	B	C	C	A	A	C	A	A	A
TECHNOLOGY BASED TRAINING	C	C	C	A	A	A	C	C	C
VIDEO									
- TALKING	C	C	C	C	A	A	C	C	C
- CASE/DRAMA	B	C	C	C	A	B	B	B	C
OTHER									
GROUP LEARNING									
- ABOUT GROUPS	A	A	A	A	A	C	A	A	A
- OTHER LEARNING	A	A	A	A	A	C	A	A	A
LEARNING REVIEWS	B	A	A	A	A	B	C	C	A

NOTE:

1. RATING SCALE A = STRONG LINK
   B = MODERATE LINK
   C = WEAK LINK
2. 'Knowles' - refers to at least one of major elements in Knowles theory.
3. 'Argyris' - refers to Double Loop Learning.
4. 'Kolb' - refers to: 1) Learning Cycle fully available
   2) Influence of Learning Styles on acceptability of method.

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FRAMEWORK 3.

Management Development Methods and Learning to Learn

	POTENTIAL	VARIETY	TYPES OF LEARNING			
			Cognitive	Affective	Inter Personal	Self Knowledge
AT WORK						
COACHING	A	A	C	B	B	A
MENTORING	A	A	C	B	B	A
LINE MANAGER AS DEVELOPER	A	A	C	B	B	A
THROUGH THE JOB	A	A	C	B	B	A
OFF THE JOB						
ACTION LEARNING	A	B	B	B	B	B
CASE STUDY	B	C	B	C	B	C
DISTANCE LEARNING	C	C	A	B	C	C
LECTURE	C	C	A	C	C	C
OUTDOOR	A	C	C	A	A	A
READING	C	C	A	C	C	B
ROLE PLAY	A	C	C	A	A	B
SIMULATIONS	A	C	C	A	A	A
TECHNOLOGY BASED TRAINING	C	C	A	C	C	C
VIDEO						
- TALKING HEAD	C	C	A	C	C	C
- CASE/DRAMA	C	C	B	B	B	C
OTHER						
GROUP LEARNING						
- ABOUT GROUPS	A	A	B	A	A	A
- OTHER LEARNING	A	A	C	A	A	A
LEARNING REVIEWS	A	C	B	C	C	A

NOTE:

1. RATING SCALE A = STRONG LIKELIHOOD
   B = MODERATE LIKELIHOOD
   C = LOW LIKELIHOOD

2. For this Chart Learning to Learn is assessed on :
   - potential to identify how to learn by self and others
   - variety of learning experiences involved
   - areas/types of learning.

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FRAMEWORK 4.
Management Development Methods
Congruence with Strong Learning Styles
Preference of Learner

	ACTIVIST	REFLECTOR	THEORIST	PRAGMATIST
AT WORK				
COACHING	C	A	B	A
MENTORING	C	A	B	A
LINE MANAGER AS DEVELOPER	C	A	B	A
THROUGH THE JOB	A	A	A	A
OFF THE JOB				
ACTION LEARNING	A	B	B	A
CASE STUDY	B	B	B	B
DISTANCE LEARNING	C	A	A	B
LECTURE	C	A	A	B
OUTDOOR	A	B	C	B
READING	C	A	A	B
ROLE PLAY	A	A	B	A
SIMULATIONS	A	B	B	B
TECHNOLOGY BASED TRAINING	C	A	B	B
VIDEO				
- TALKING HEAD	B	A	A	A
- CASE/DRAMA	C	B	B	A
OTHER				
GROUP LEARNING				
- ABOUT GROUPS	B	A	A	A
- OTHER LEARNING	B	B	B	B
LEARNING REVIEWS	C	A	A	A

NOTE:

1. RATING SCALE A = STRONG CONGRUENCE
   B = MODERATE CONGRUENCE
   C = LOW CONGRUENCE
2. Through the Job — The ratings here propose that each style is strongly congruent with some features of this Method (though they may miss the full benefits open through other styles).

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Effectiveness of 360-Degree Feedback on Management Development from the Recipient's Perspective

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What influences managers to accept or deflect 360-degree feedback in a management development program? What influences their change decision process toward deep versus superficial change? Feedback recipient interviews revealed how the processes work over time. Developmental dialog with staff or peers led to deep, resilient change. Source credibility was important. Relationship changes from feedback-seeking were associated with perspective transformation. Some broadened their perspective and changed assumptions, suggesting that 360-degree feedback can lead to development beyond skill-building.

Management development programs often seek to foster perspective changes: how managers understand their work, their roles with others, and their attitudes about change and control (Akin, 1987; Burke, 1994, Kets de Vries, 1989; Nadler & Tushman, 1990; Rhinesmith, 1993). To achieve such change, some programs employ 360-degree feedback, in which managers receive a report on how their boss, peers, and direct reports view their managerial behavior (Clark & Clark, 1990; Zimmerman, 1993). The effectiveness of this approach is documented by a few quantitative studies (Hazucha, Hezlett, & Schneider, 1993; Edwards, 1990; Fruge & Rollins, 1993) and by testimonial and anecdotal data from those who have experience with such feedback (Corporate Leadership Council, 1995; Kaplan, 1993). However, there has been a lack of systematic study of how the phenomena of 360-degree feedback relates to profound change, or how and why it can be effective.

This study sought to discover how the experience of 360-degree feedback works, from the recipients' perspective. More specifically, it identified and described what influences recipients of such feedback to accept it, what guides them to change deeply, and what makes the change durable. The approach was qualitative, generating insights from intensive interview data from several managers who had recently experienced 360-degree feedback in a management development program at a high technology firm. The findings extend previous research in new directions by describing in depth the experience of several managers who changed and by proposing a theory of how the process actually works within their context.

Literature Themes

Several literatures provide insights on how the 360 degree feedback process operates: empirical work on feedback from the late 1970s to 1980s, later extended to 360-degree feedback in particular; Industrial/Organizational Psychology work on change; and writings from adult learning on perspective transformation.

Ashford and Cummings (1983) proposed two types of feedback-seeking behavior, monitoring the environment and direct inquiry, with costs and benefits of each. The present study found other important benefits to direct inquiry: it was associated with relationship-building, increased trust, and a developmental dialog that led to a partnership that was associated with perspective change. When the manager's attitude toward direct reports allowed openness to direct feedback, the traditional perspective of control was altered.

Guidelines exist on how to give feedback, without specifying the special case of 360-degree feedback. Huntsberry (1994) cautions that mis-used multi-rater instruments can lead to self-doubt when the feedback was strongly negative and mistrust of colleagues when feedback was

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never fully accepted as valid. Baron (1988) suggested criteria for constructive feedback: specific, considerate, and without attribution of poor performance to internal causes. Lawrence & Wiswell (1995) summarized the literature on feedback by suggesting that effective feedback has three key characteristics: specificity, empathy, and inquiry.

While some organizations use 360-degree feedback for performance evaluation, there was a clear and exclusive development focus in the study reported here. London (1993) reports that one-third of raters in one study would have raised the ratings for their peers and bosses if salary decisions had been affected. Bernardin, Hagan, & Kane (1995) suggest that peer managers in a retail organization may have colluded to improve scores when such feedback was used for performance appraisal.

Antonioni & Keenan (1992) found differences in reaction to 360-degree feedback by source (superiors, peers, staff), with greater surprise at negative feedback from staff. They also predicted that a negative response to feedback would be driven by credibility of the feedback source. This finding may also be explained as an instance of fundamental attributional bias and its effect on managers' decisions explained by Wiswell and Lawrence (1994). Their research suggests a different causal direction, that source credibility may be driven by the nature of the feedback.

Some sources in the literature on 360-degree feedback have suggested that face-to-face corroboration of the feedback increases its impact on the receiver (Edelstein & Armstrong, 1993; Kaplan, 1993; Carton, 1994). The present study found that when that face-to-face contact was extended to a partnership in a developmental dialog, then the feedback receivers gain both important support to continue new behaviors and a changed relationship with the feedback givers.

Kluger and Denisi (1996) offer a historical review of feedback literature from the Industrial/Organizational Psychology perspective, and propose a feedback intervention theory. They report several mechanisms to reduce gaps between the feedback performance level and the standard, which parallel the approaches reported in other literatures: change the behavior, change the standard, reject the feedback, or escape the situation. They also propose a model hierarchy of attention to feedback, grouping it into meta-task processes involving the self, task-monitoring processes, and task-learning processes. They propose in their feedback intervention theory that feedback at the lowest level impedes skillful performance, and that feedback at the highest level is likely to have affective responses. This suggests a parallel to Argyris' (1994) work on defensive communication norms which avoid feedback and prevent learning..

Hellervik, Hazucha, & Schneider's (1992) five stage Integrated Behavior Change Framework provides a good overlay to the research results from the I/O Psychology perspective. This study adds a dimension of illustration and extension to that model at each phase.

Table 1 Integrated Behavior Change Framework.

Framework Element	Related Findings
Assessment/Needs Analysis	Cases in this study were eager for assessment information in feedback-starved environment
Assignment of Behavioral Standards	Cases sought dialog about surprising feedback, moved from assignment to collaborative definition
Intention Formulation and Protection	Cases varied in commitment to change; this research found that the most profound and successful change was guided by a rich feedback dialog with peers and direct reports. Developmental dialog with direct reports and peers begins with feedback clarification discussion. Changes in self- or role perspective affected depth & durability of change.
Behavioral Expression in Change Environment	Initiative in pursing a development dialog with peers and direct reports. Development dialog was a critical factor at this stage, moving the focus of change from individual to collaborative effort.
Generalization and Maintenance of New Behaviors	Development dialog affects several areas, positively or negatively: • Trust • Communication • Momentum to continue change

The research also adds detail and instance to some literature of Adult Learning. Mezirow (1994) suggests that the urgent need to understand the meaning of our experience is central to adult development, and that we do so by striving toward viewpoints that are more inclusive, discriminating, and integrative. This was specifically reflected in one manager's realization that "working hard is different from challenging your basic assumptions, or challenging your basic framework of how you operated." His/her "sense of complacency" before the management development program was shaken by *load* (workload and 360-degree feedback results concurrent with a sports injury), perhaps leading to the realization that "As a manager, it can't be [fairly easy]... the new attitude that I think came out of this course is that it's NOT going to be easy, that you were going to have to constantly challenge [yourself]."

Kegan's levels of adult development (1994, 1986) were also exemplified in this research. In cases where there seemed to be a changed perspective, part of that change was to see more possibilities, to look at situations from the others' points of view, to mentally switch roles with others, and to view issues as complex. In response to a question about seeing issues as black and white versus shades of gray, a manager in the study said, "I've got more damn gray about me now than I *ever* had!" Three of the five primary cases in this study seemed to operate at Level 4 within Kegan's taxonomy, at which autonomy and interdependence balance, choice of framework becomes available, and the world no longer looks simple.

Where the research adds value specifically to the works of Mezirow, Kegan, and others is that these cases were responding within their work context to a *planned* critical moment. Such an experience was for some what Mezirow (1990) calls a "disorienting dilemma," a trigger event that forces new meaning. The responses to a deliberate critical moment are the heart of the research, and the variety of experience in dealing with it from the adult development perspective elaborates how some adults will consciously seek to develop new perspectives. Within this research, those who sought to develop a different perspective through developmental dialog achieved their goal.

Research Procedures

A group of 84 middle managers were engaged over two program years in a management development program at a high technology corporation. The managers participated in various program modules and learning teams, and received 360-degree feedback using the Profilor instrument from Personnel Decisions, Inc. The managers attended feedback sessions to process their report data and engaged with their learning teams in development planning. From these meetings, initial determinations were made about if and how the participants seemed to be changing.

A pool of 15 participants was purposefully selected to be interviewed. The basis for selection was to find several who had changed most, several who had changed some, and several who had not changed. The design included five from the first program year (1993-1994) to interview at 22 months after 360-degree feedback, and eight from the second program year (1994-1995) to interview twice, at approximately 4 and 8 months after the 360-degree feedback. After the initial interviews from the second program year, two more were added and interviewed once at 6 months, to correct an imbalance by finding cases who exemplified the absence of change. In all, 24 interviews, from 45 minutes to 2 hours in length, were conducted.

The interviews were transcribed, a subset of five cases was selected as exemplifying the phenomena of interest, and their interview data were analyzed in depth. The five cases included

- one who clearly experienced a perspective transformation and enthusiastically sought to accelerate the change, in and out of work;
- one who experienced a revelation of expectations about managerial work, struggled to persuade his/her team to believe in the change, and eventually succeeded in becoming a very different kind of manager;
- one who approached the experience cautiously because of a bad prior experience with such feedback, and changed little;

- one who got contradictory feedback from two bosses and tried to reconcile both with experiences of success; and
- one who exemplified feedback-seeking behavior leading to an approach to managerial work that was profoundly different from his/her early career.

These five cases provided the necessary richness and contrast about the processes of understanding and accepting feedback, what influences the depth of change, and what influences its duration.

The approach to analysis followed guidelines from Strauss & Corbin (1990) and Miles & Huberman (1994). The interview data were coded using a constant comparative method to systematically notice similarities within and across interviews, and to build a description in terms of concepts, processes, phenomena, dimensions, and locations within dimensions. Qualitative research software (The Ethnograph v4.0) made this detailed analysis of nearly 10,000 lines of text possible. After coding and recoding to reconcile and build concepts across interviews, various tables and displays were used as interim analytical steps. These tables were then used to fuel cross-case searches on codes linked to phenomena of interest as the research evolved.

The data products from searches on most major concepts, and especially those linked to the original research questions, were analyzed on a cross-case basis. From the cross-case analysis against the research questions, the findings emerged.

Review of Questions and Summary Findings

The research explored the managers' experience from the framework of three research questions, listed as subheadings below, and found answers that went beyond the scope of the questions.

What processes influence recipients' initial acceptance or deflection of 360-feedback? The research produced a list of factors and a description of their interaction based on the experience of several managers. The important factors of feedback credibility, source credibility, feedback history, and feedback norms interacted in interesting ways: strong negatives in any factor made feedback acceptance very difficult, while moderate challenge to established feedback norms actually increased commitment to the process.

After the feedback, what influences the development decisions about the content of any change and the commitment to that change? The research indicates that a *developmental dialog* with direct reports and/or peers, which clarifies mutual expectations, builds support for change, and establishes a continuing source of feedback, seems to be present and important in cases where there was deep, lasting change versus change at the skill level only.

As a change effort is attempted, what influences participants' continuation of the change? The research found that in some cases, the developmental dialog helped managers achieve a different perspective on their work, even on themselves, and that this redefinition seemed to bring resilience. The research also found that organizations may undo the intended development of a 360-degree program by increasing time pressure, stress, and organizational uncertainty, and by reducing organizational credibility.

Findings

Just as 360-degree feedback sometimes achieves message clarity by providing views from different perspectives, in order to fully represent the findings, four views are presented below: sequential phases, individual, relationships, and organizational.

Sequential phases Findings from before, during, and after the 360-degree feedback and development experience are presented as the first view.

From *before* the feedback is received, *feedback history* has an effect on how 360-degree feedback will be received; specifically, where an individual had prior negative experience of seeking feedback directly or with instruments, that individual may experience early deflection or misinterpretation of feedback messages. One manager's prior experience of getting a multi-rater assessment from a new and hostile group led him/her to take an extremely cautious, literal, narrow interpretation of the feedback message meanings, and to challenge and question the credibility of

the instrument, the raters, and the process. More generally, where the *feedback norms* are to withhold any negative feedback or give no feedback at all, there may be unreasonably great expectations. In a feedback-poor environment, 360-degree feedback may be a deluge in a desert.

Results from the period *during* the feedback indicate that while participants are receiving 360-degree feedback and planning what to do with it, *change-support* (sharing ideas, building support networks, establishing some accountability with direct reports or peers) increases feedback acceptance, and distractions of *load* (increases in workload, stress, time pressures) are usually unhelpful both at the moment of acceptance or deflection and beyond.

From the period *after* the feedback and development planning, the need for *change-support* continues and increases. Those who set up and nurture a *development dialog* with direct reports and peers seem to gain both support and changed relationships.

Individual Individual perspectives contain several factors that contribute to making an individual *ready* for 360-degree feedback: a sense of adequate security to take risks, a managed level of stress, and cognitive maturity played a role for the cases in this research.

Adequate sense of *security* to take risks manifested itself as one contrast between the cases that changed more (1 and 2) and those that changed relatively less (3 and 4). One manager voiced no concern over security, and in fact explicitly mentioned "So except for the fact that I already had too much to do, my environment was very conducive to experimenting, to taking the time if I had it to do these things."

A managed level of stress also seems connected with greater benefit from 360-degree feedback. While all managers may routinely seem to experience high stress, those who are dealing a life transition (divorce, death of parent, marriage, birth of child, etc.) should perhaps defer this experience. Of the original 15 persons interviewed, at least three were going through such transitions and were not among the five cases selected for extensive examination; however, they consistently reported setting aside the feedback during the transition and returning to deal with it when they were able.

Cognitive maturity refers to the level of adult cognitive development referenced above. Those cases in this research who seemed to grow most also showed a high interest in stepping outside themselves and reflecting on what they were doing, how others saw them, what their essential roles were. The cases who changed relatively little spoke often in dualistic terms, seeing their world as more clearly contrasted as right/wrong.

Relationships The Relationships perspective showed that seeking feedback is not a neutral act in a relationship: depending on how the communication is handled, feedback seeking and giving can do harm or good in a relationship. This research found, repeatedly, that the cases experienced the feedback as having the effect of focusing their discussions on what had been undiscussable, which led to more or less trust as an outcome.

A critical moment seems to come in the relationship between a feedback recipient and rater(s). The conversation after the feedback is an opportunity for disclosure that seems to build the relationship by becoming somewhat vulnerable.

When the relationship aspects are handled well, it can lead to a *new relationship*. One manager engaged a boss in a mutual development dialog, both seeking and giving feedback; he/she reports that it has made a large positive difference for both. Another used the 360-degree feedback process as an opportunity to establish a new relationship with a distant peer, who became a mentor. Another describes the improved relationships and ability to communicate about difficult issues with direct reports, and also cites the powerful impact the support of a learning team had in reaching the changed attitude. Another describes an important peer who provided trusted counsel through troubled times.

Organizational The Organizational view of the findings shows that 360-degree feedback has a large impact on the time, energy, and motivation of those who touch it. And once touched, it sticks -- that is, when organizations commit to 360-degree feedback, it is watched closely as a symbolic corporate act.

As the feedback follow-up is important in building relationships between individuals, it is also important for the relationships between individuals and the collective organization. Just as trust can be damaged by inaction when feedback is exchanged between individuals, the same trust and credibility factors apply.

There may also exist a threshold of *organizational uncertainty* that will undermine the efforts to implement a 360-degree feedback process. In this research, where uncertainty was greater, change was smaller ; however, for one case organizational uncertainty was very high and his/her readiness to change overcame worrying about the organization.

Implications for HRD Practice

From this research, some recommendations emerge to guide practices of organizations that would implement a 360-degree feedback program.

Manage support for the process and participants before, during, and after. The trust damage when support is offered and then withdrawn can be large. This may mean visible, durable organizational support, and the increased trust in the organization may be well worth it.

Keep a relationship and development focus embedded in the program structure to maximize effectiveness. In management development programs, encouraging and training participants to form learning groups and to establish developmental dialog within their "back home" environment may be critically important. In this study, that relationship-building aspect was strongly present in all cases where profound change occurred, and nearly absent in cases where the change was superficial. Some specific interpersonal communications training may be appropriate to support this dialog.

Be wary of the wrong organizational moments to start a program like this: during this research, there were RIFs and massive restructuring. The climate of organizational turmoil had an eviscerating effect on trust in the organization, which seemed to reduce the motivation to grow and develop among some managers in this study.

A potential use of 360-degree feedback other than for development is in performance evaluation. This use should be considered with great caution because the data may be biased and the candid developmental dialog, which is fueled by trust, could be compromised if an element of gaming enters the process. Moreover, when feedback information is made available to supervisors, negative dynamics of deflection and discounting may increase.

Implications for Future HRD Research

This research suggested several directions for possible future studies.

What is the relationship (if any) between post-formal cognitive development and how recipients understand 360-feedback? This qualitative research, within its limits, observed that those who begin to see more possibilities, develop the ability to step outside of themselves to see issues from other perspectives, who become reflective, critical learners, seem to integrate their feedback more fully into their behavior. Those who speak in dualistic terms and remain convinced of "one right answer" seemed to approach the feedback with less understanding and a narrow skill focus. Do those who have achieved more cognitive maturity understand and respond to the feedback experience differently?

What is the relationship between cognitive maturity and participation in a developmental dialog? This research suggests that they are related: those who actively participated in developmental dialog, with openness to others' feedback, seemed to gain some ability to reflect differently on their work, their roles, their selves, and seemed to achieve a higher level of cognitive development. Future studies might confirm this in other contexts, or look for an empirical link.

How might developmental dialog be encouraged in an organization? This study found that where feedback recipients focused on support through dialog with direct reports and peers, the change was greater. Future research might examine whether such benefits hold true in other organizational contexts, how such structures for support might be organizationally encouraged, and if specific interpersonal skills training can have an enhancing effect on the quality and use of dialog.

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